

Fig. 1

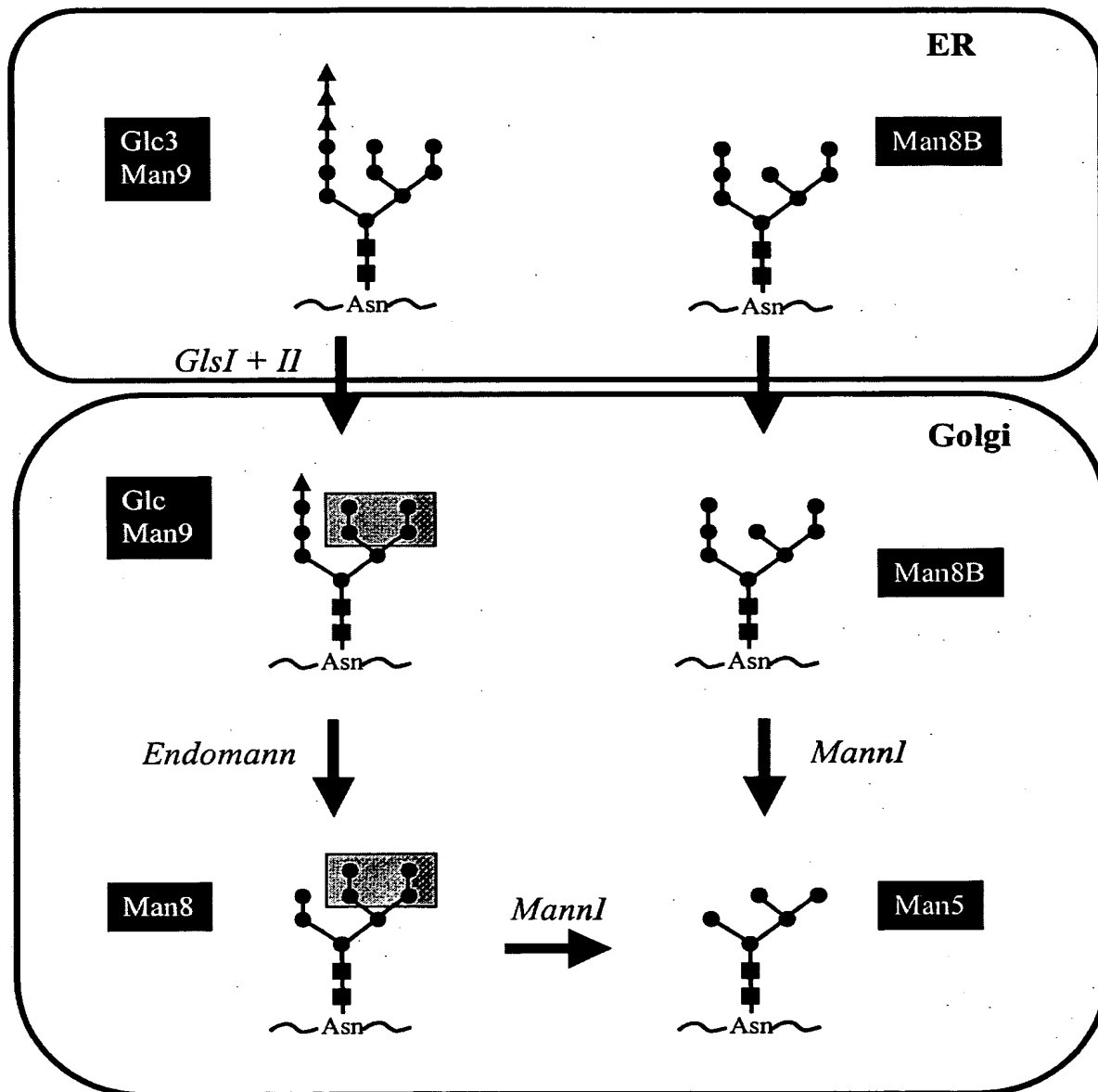


Fig. 2

A

>gi|20547442|ref|XP\_113472.1| (XM\_113472) hypothetical protein FLJ12838 [Homo sapiens]  
Length = 290

Score = 526 bits (1354), Expect = e-148  
Identities = 258/290 (88%), Positives = 276/290 (94%)

Query: 162 MKQMRASIGVLALSWYPPDASDENGATDYLVPTILDKAHKYNLKVTFHIEPYSNRDDQ 221  
M+QMRASIGVLALSWYPPD +DENG TD LVPTILDKAHKYNLKVTFHIEPYSNRDDQ  
Sbjct: 1 MRQMRASIGVLALSWYPPDVNDENGEPDNLVPTILDKAHKYNLKVTFHIEPYSNRDDQ 60

Query: 222 NMHQNVKYIIDKYGNHPAFYRYKTRMGHSLPMFYIYDSYITKPKTVANLLTPSGSQSVRG 281  
NM++NVKYIIDKYGNHPAFYRYKT+ G++LPMFY+YDSYITKP+ WANLLT SGS+S+R  
Sbjct: 61 NMYKNVKYIIDKYGNHPAFYRYKTKTGNALPMFYVYDSYITKPEKWANLLTSGSRSIRN 120

Query: 282 SPYDGLFIALLVEEKHKYDILQSGFDGIYTYFATNGFTYGSSHQWVNKLKSFCEKNNHIF 341  
SPYDGLFIALLVEEKHKYDILQSGFDGIYTYFATNGFTYGSSHQW LK FC+K N+IF  
Sbjct: 121 SPYDGLFIALLVEEKHKYDILQSGFDGIYTYFATNGFTYGSSHQWASLKLFCDKYNLIF 180

Query: 342 IPSVGPGYIDTSIRPWNTONTRNRINGKYYEVGLSAAALOTQPSLISITSFNEWHEGTQIE 401  
IPSVGPGYIDTSIRPWNTONTRNRINGKYYE+GLSAAALOT+PSLISITSFNEWHEGTQIE  
Sbjct: 181 IPSVGPGYIDTSIRPWNTONTRNRINGKYYEIGLSAAALQTRPSLISITSFNEWHEGTQIE 240

Query: 402 KAVPKRTANTVYLDYRPHKPSLYLEITRKWSEKYSKERMTYALDQQLPAS 451  
KAVPKRT+NTVYLDYRPHK LYLE+TRKWSEKYSKER TYALD+QLP S  
Sbjct: 241 KAVPKRTSNTVYLDYRPHKPGLYLELTRKWSEKYSKERATYALDROLVPS 290

B

>gi|18031878|gb|AAL07306.1| L (AY048774) mandaselin short form [Homo sapiens]  
Length = 195

Score = 49.7 bits (117), Expect = 9e-06  
Identities = 22/23 (95%), Positives = 23/23 (99%)

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MRQMRASIGVLALSWYPPDVN+  
Sbjct: 173 MRQMRASIGVLALSWYPPDVNE 195

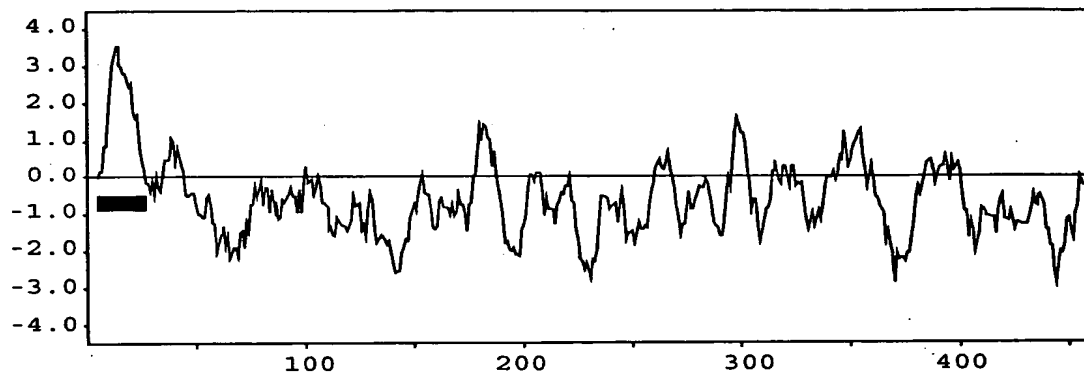
C

>gi|18031878|gb|AAL07306.1| mandaselin short form [Homo sapiens]  
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TNTKNLKSVEITMKPSKASELNLDLPPLNNYLHVFYYSWYGNPQFDGKYIHHNHPVLEHWDPRIAKNYP  
QGRHNPPDDIGSSFYPELGSSYSSRDPSVIETHMRQMRASIGVLALSWYPPDVNE

Fig. 3

1 ATGGCAAAGTTTCGGAGAAGGACTTGCATCATTTTGGCACTTTTATTCTATTTATTTCTCTCTGATGATGGGTTTAAAAATGCTGAGACCAA  
 1▶ M A K F R R R T C I I L A L F I L F I F S L M M G L K M L R P N  
 96 TACAGCTACTTTTGGAGCTCCTTTTGGACTTGACCTTCTTCCAGAACTTCATCAACGAACTATTCATTTGGGGAAAAATTTTGATTTCAAAAGA  
 32▶ T A T F G A P F G L D L L P E L H Q R T I H L G K N F D F Q K  
 191 GTGACAGAATCAACAGTGAACAAATACCAAGAATTTAAAAAGTGTGAAATCACTATGAAACCTTCCAAAGCCTCTGAACTTAACTTGGATGAA  
 64▶ S D R I N S E T N T K N L K S V E I T M K P S K A S E L N L D E  
 286 CTACCACCTCTGAACAATTATCTACATGTATTTTATTACAGTTGGTATGGAAATCCACAATTGATGGTAAATATATACATTGGAATCATCCAGT  
 96▶ L P P L N N Y L H V F Y Y S W Y G N P Q F D G K Y I H W N H P V  
 381 GTTAGAGCATTGGGACCCTAGAATAGCCAAGAATTATCCACAAGGGAGACACAACCTCCAGATGACATTGGCTCCAGCTTTTATCCTGAATTGG  
 127▶ L E H W D P R I A K N Y P Q G R H N P P D D I G S S F Y P E L  
 476 GAAGTTACAGTTCTCGGGATCCTTCTGTGATAGAAATCAGATGAGACAAATGCGCTCAGCTTCAATTGGTGTACTAGCCCTCTCTT  
 159▶ G S Y S S R D P S V I E T H M R Q M R S A S I G V L A L S  
 563 GGTACCCACCTGATGTAATGATGAAAATGGAGAACCTACTGATAACTTGGTACCCACTATTTTGGATAAAGCTCATAAATATAACCTAAA  
 188▶ W Y P P D V N D E N G E P T D N L V P T I L D K A H K Y N L K  
 654 GGTACTTTTACATAGAACCATATAGCAATCGAGATGATCAAAACATGTACAAAATGTCAAGTATATTATAGACAAATATGGAATCATCCGG  
 218▶ V T F H I E P Y S N R D D Q N M Y K N V K Y I I D K Y G N H P  
 749 CCTTTTACAGGTACAAGACGAAGACTGGCAATGCTCTTCCTATGTTTTATGTCTATGATTCCTATATTACCAAGCCTGAAAAATGGGCCAATCTG  
 250▶ A F Y R Y K T K T G N A L P M F Y V Y D S Y I T K P E K W A N L  
 844 TTAACCACTCAGGGTCTCGGAGTATTGCAATTCTCCTTATGATGGACTGTTTATTGCCCTTCTGGTAGAAGAAAAACATAAGTATGATATTCT  
 282▶ L T T S G S R S I R N S P Y D G L F I A L L V E E K H K Y D I L  
 939 TCAAAGTGGTTTTGATGGAATTTACACATATTTGCCACAAATGGCTTTACTTATGGCTCATCACATCAGAATTGGGCTAGCCTAAAATTAATT  
 313▶ Q S G F D G I Y T Y F A T N G F T Y G S S H Q N W A S L K L I  
 1034 GTGATAAATACAACTTAATATTTATCCCAAGTGTGGGCCAGGATACATAGATACCAGCATCCGTCCATGGAACACGCAAAACACTCGGAACCGA  
 345▶ C D K Y N L I F I P S V G P G Y I D T S I R P W N T Q N T R N R  
 1129 ATCAATGGGAAGTATTATGAAATTTGGTCTGAGTGCCGCACTTCAGACACGCCCCAGCTTAATTTCTATCACCTCTTTAATGAGTGGCATGAAGG  
 377▶ I N G K Y Y E I G L S A A L Q T R P S L I S I T S F N E W H E G  
 1224 AACTCAGATTGAAAAAGCTGTTCCCAAAAGAACAGTAATACAGTGACCTAGATTACCGTCTCATAAACAGGTCTTTACCTAGAACTGACTC  
 408▶ T Q I E K A V P K R T S N T V Y L D Y R P H K P G L Y L E L T  
 1319 GCAAGTGGTCTGAAAAATACAGTAAGGAAAGAGCAACTTATGCATTAGATCGCCAGCTGCCTGTTTCTTAA  
 440▶ R K W S E K Y S K E R A T Y A L D R Q L P V S

Fig. 4



**Fig. 5**

1 ATGGCAAAATTTGGAAGAAGGACCTGCATCCTTTTGTCACTTTTATTCTATTTATTTTCTCTGATGATGGGCTTAAAGATGCTGTGGCCAA  
 1▶ M A K F R R R T C I L L S L F I L F I F S L M M G L K M L W P  
 95 ACGCAGCATCCTTTGGACCTCCTTTTGGACTTGACCTCCTCCAGAACCTTCATCCACTAAATGCGCATTGGGAAACAAAGCTGACTTCCAAAG  
 32▶ N A A S F G P P F G L D L L P E L H P L N A H S G N K A D F Q R  
 189 GAGTGATAGAATCAACATGGAACAAACACCAAGGCTTTAAAAGGCGCTGGCATGACTGTGCTGCCAGCCAAAGCCTCTGAGGTGAACCTGGAA  
 63▶ S D R I N M E T N T K A L K G A G M T V L P A K A S E V N L E  
 283 GAACTACCTCCTCTGAATTACTTTTACATGCATTTTATTACAGTTGGTATGGAAATCCACAGTTTGATGGTAAATATATACACTGGAATCATC  
 95▶ E L P P L N Y F L H A F Y Y S W Y G N P Q F D G K Y I H W N H  
 377 CGGTCTGGAACTGGGACCCTCGGATAGCCAAGAACTATCCACAAGGACAACATAGTCTCCAGACGACATTGGCTCCAGTTTATCTCTGA  
 126▶ P V L E H W D P R I A K N Y P Q G Q H S P P D D I G S S F Y P E  
 471 GTTAGGAAGTTACAGCTCTCGAGACCTTCTGTGCATAGAACTCACATGAAACAAATGCGCTCAGCCTCAATTGGAGTTCTGGCCCTGTCTGG  
 157▶ L G S Y S S R D P S V I E T H M K Q M R S A S I G V L A L S W  
 565 TACCCACCTGATTCAAGGGATGACAATGGCGAAGCTACTGATCACTTGGTGCCAACCATTTTGGATAAAGCTCATAAATATAATCTGAAGGTCA  
 189▶ Y P P D S R D D N G E A T D H L V P T I L D K A H K Y N L K V  
 659 CTTTTACATAGAGCCATATAGCAATCGAGATGATCAAAACATGCATCAAAATATCAAGTATATTATAGACAAATATGGAAACCATCCAGCCTT  
 220▶ T F H I E P Y S N R D D Q N M H Q N I K Y I I D K Y G N H P A F  
 753 TTATAGATACAAGACCAGGACTGGGCATTCTCTGCCCATGTTTTATGTCTATGATTCTTACATCACAAGCCTACAATATGGGCCAATCTGTTA  
 251▶ Y R Y K T R T G H S L P M F Y V Y D S Y I T K P T I W A N L L  
 847 ACACCCTCCGGATCTCAGAGTGTTCGAGTTCTCTTTATGATGGATTGTTTATTGCACCTTCTAGTAGAAGAAAAGCATAAAAATGATATTCTTC  
 283▶ T P S G S Q S V R S S L Y D G L F I A L L V E E K H K N D I L  
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 345▶ E K N N L M F I P S V G P G Y I D T S I R P W N T Q N T R N R  
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 377▶ V N G K Y Y E V G L S A A L Q T H P S L I S I T S P N E W H E  
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 408▶ G T Q I E K A V P K R T A N T I Y L D Y R P H K P S L Y L E L T  
 1317 TCGAAAGTGGTCTGAAAAATTCACTAAGGAAAGAAATGACGTATGCATTGGATCAACAGCAGCCTGCTTCATAA  
 439▶ R K W S E K F S K E R M T Y A L D Q Q Q P A S

Fig. 6

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1  MAKFRRRRTCI I L A L F I L F I F S L M M G L K M L R P N T A T F G A P F hEndo
1  MAKFRRRRTCI L L S L F I L F I F S L M M G L K M L W P N A A S F G P P F mEndo
1  - - - - - M G A L M A T Y S E G M M G C S S V G R C F S S T L S P I I rEndo

41  G L D L L P E L H Q R T I H L G K N F D F Q K S D R I N S E T N T K N L K S V E hEndo
41  G L D L L P E L H P L N A H S G N K A D F O R S D R I N M E T N T K A L K G A G mEndo
31  T L - V A T S M K S T P R V L E N K A D F O R S D R I D M E T N T K D L K G A G rEndo

81  I T M K P S K A S E L N L D E L P P L N N Y L H V F Y Y S W Y G N P Q F D G K Y hEndo
81  M T V L P A K A S E V N L E E L P P L N Y F L H A F Y Y S W Y G N P Q F D G K Y mEndo
70  V T V H P P R A S E V N L E E L P P L N Y F V H A F Y Y S W Y G N P Q F D G K Y rEndo

121 I H W N H P V L E H W D P R I A K N Y P Q G R H N P P D D I G S S F Y P E L G S hEndo
121 I H W N H P V L E H W D P R I A K N Y P Q G Q H S P P D D I G S S F Y P E L G S mEndo
110 V H W N H P V L E H W D P R I A K N Y P Q G R H S P P D D I G S S F Y P E L G S rEndo

161 Y S S R D P S V I E T H M R Q M R S A S I G V L A L S W Y P P D V N D E N G E P hEndo
161 Y S S R D P S V I E T H M K Q M R S A S I G V L A L S W Y P P D S R D D E N G E A mEndo
150 Y S S R D P S V I E T H M K Q M R S A S I G V L A L S W Y P P D A S D E N G E A rEndo

201 T D N L V P T I L D K A H K Y N L K V T F H I E P Y S N R D D Q N M Y K N V K Y hEndo
201 T D H L V P T I L D K A H K Y N L K V T F H I E P Y S N R D D Q N M H Q N I K Y mEndo
190 T D Y L V P T I L D K A H K Y N L K V T F H I E P Y S N R D D Q N M H Q N V K Y rEndo

241 I I D K Y G N H P A F Y R Y K T K T G N A L P M F Y V Y D S Y I T K P E K W A N hEndo
241 I I D K Y G N H P A F Y R Y K T R T G H S L P M F Y V Y D S Y I T K P T I W A N mEndo
230 I I D K Y G N H P A F Y R Y K T R M G H S L P M F Y I Y D S Y I T K P K T W A N rEndo

281 L L T T S G S R S I R N S P Y D G L F I A L L V E E K H K Y D I L Q S G F D G I hEndo
281 L L T P S G S Q S V R S S L Y D G L F I A L L V E E K H K N D I L Q S G F D G I mEndo
270 L L T P S G S Q S V R G S P Y D G L F I A L L V E E K H K Y D I L Q S G F D G I rEndo

321 Y T Y F A T N G F T Y G S S H Q N W A S L K L I C D K Y N L I F I P S V G P G Y hEndo
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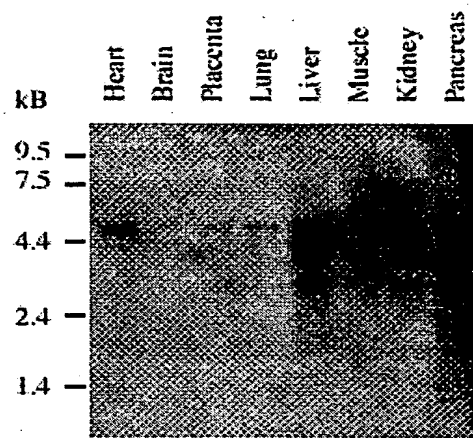
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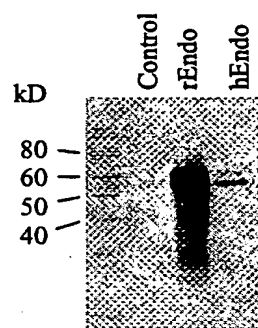
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Fig. 7

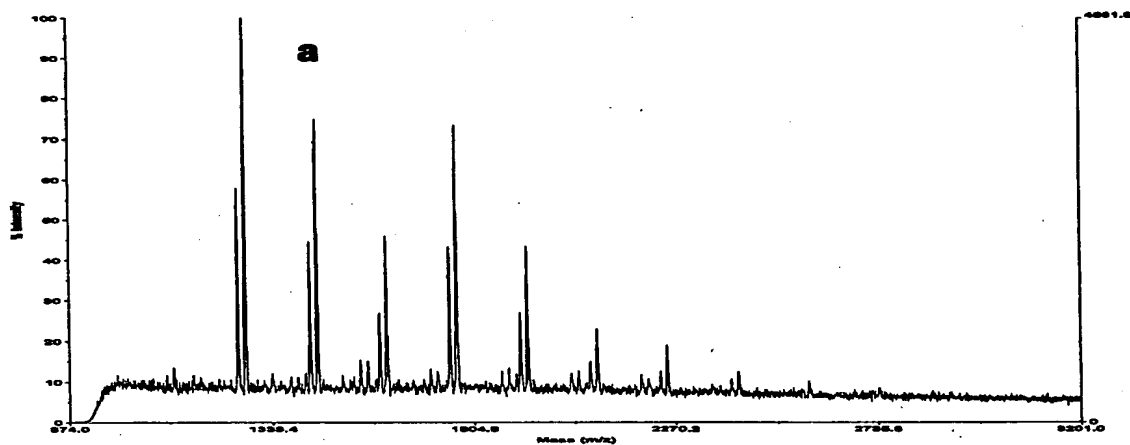


**Fig. 8**

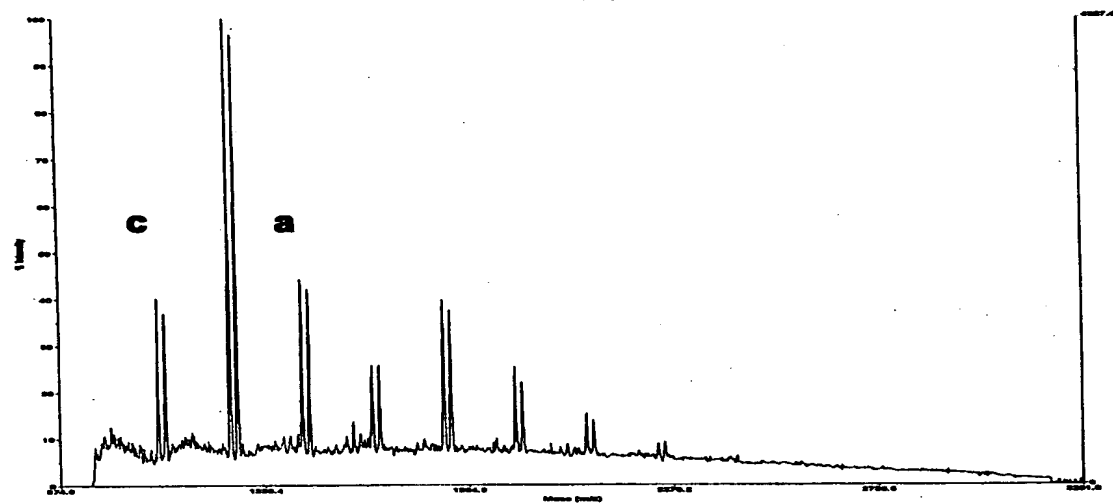




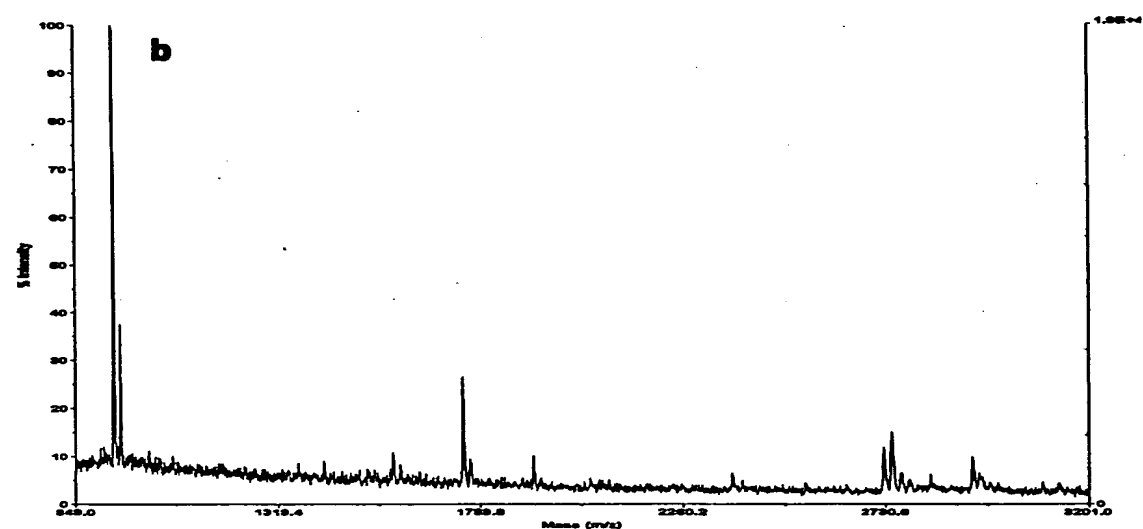
**Fig. 9**



**A**



**B**



**C**

**Fig. 10**

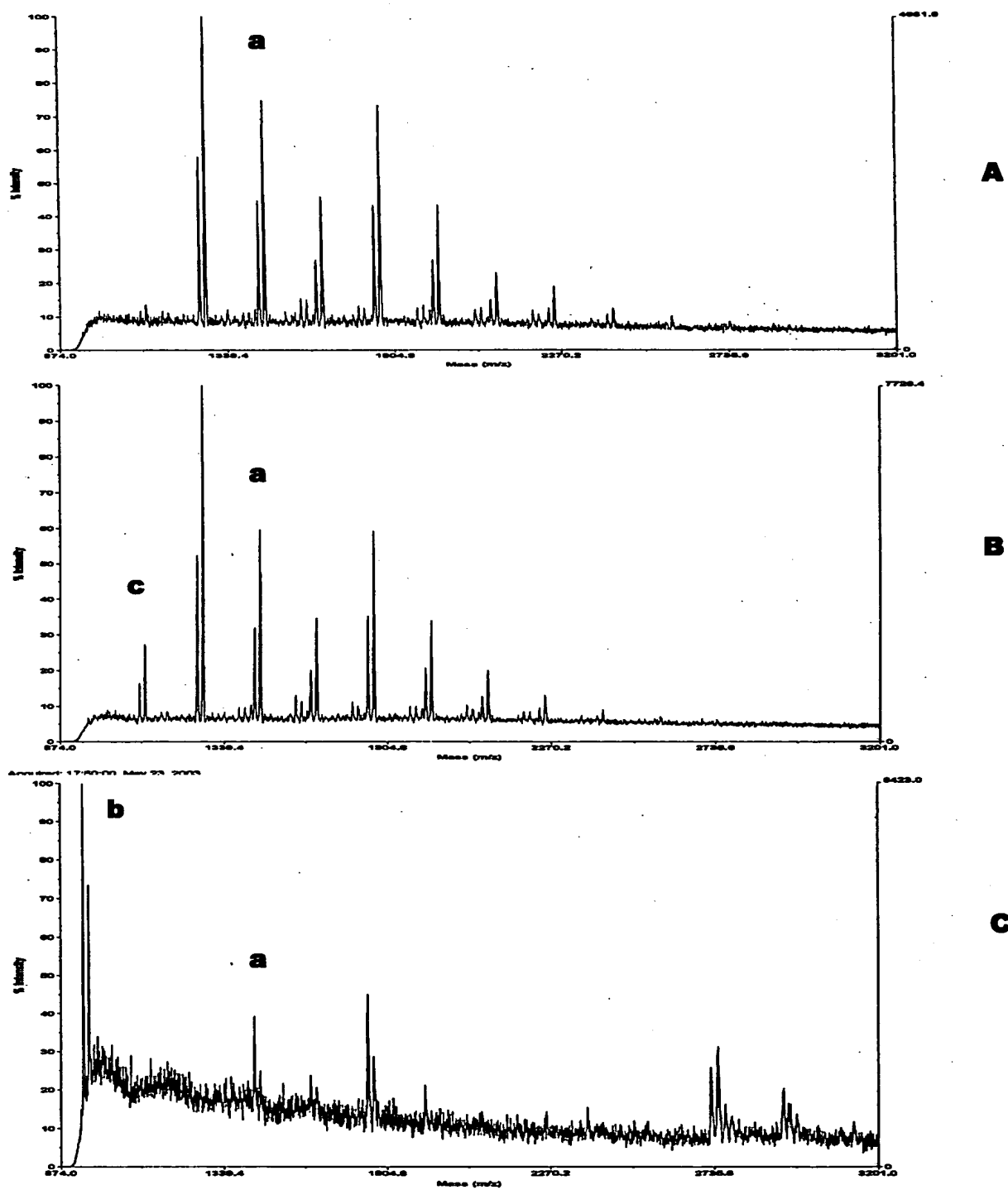


Fig. 11

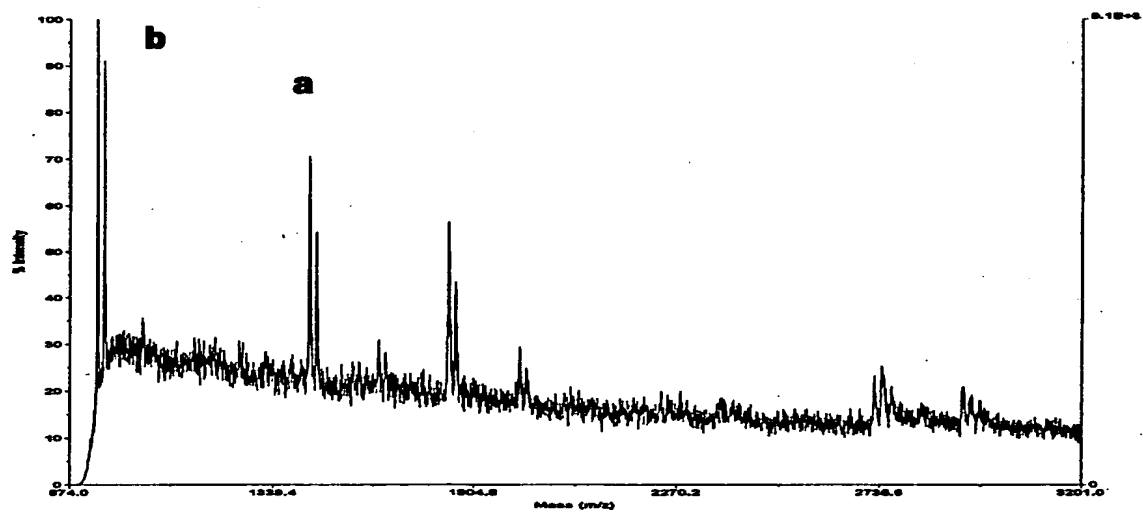
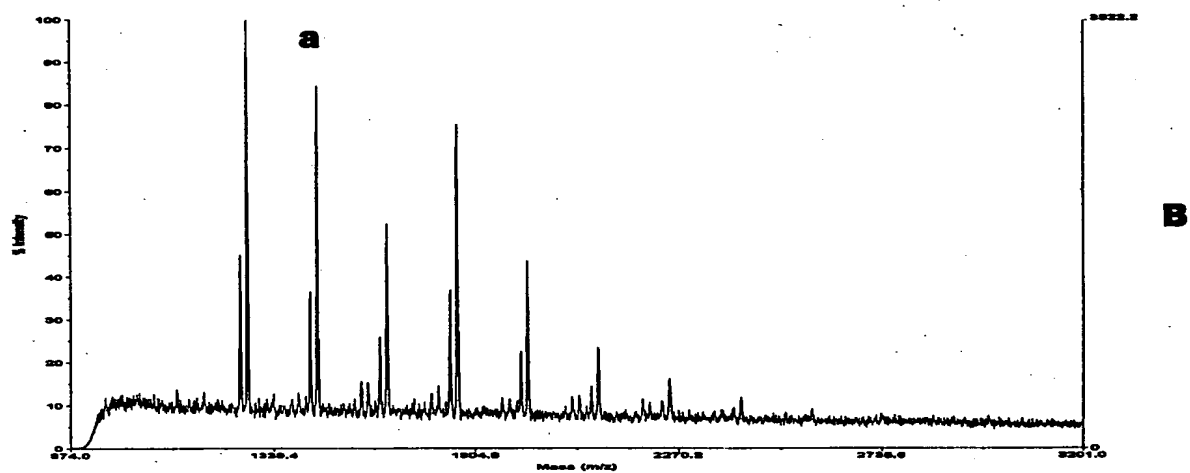
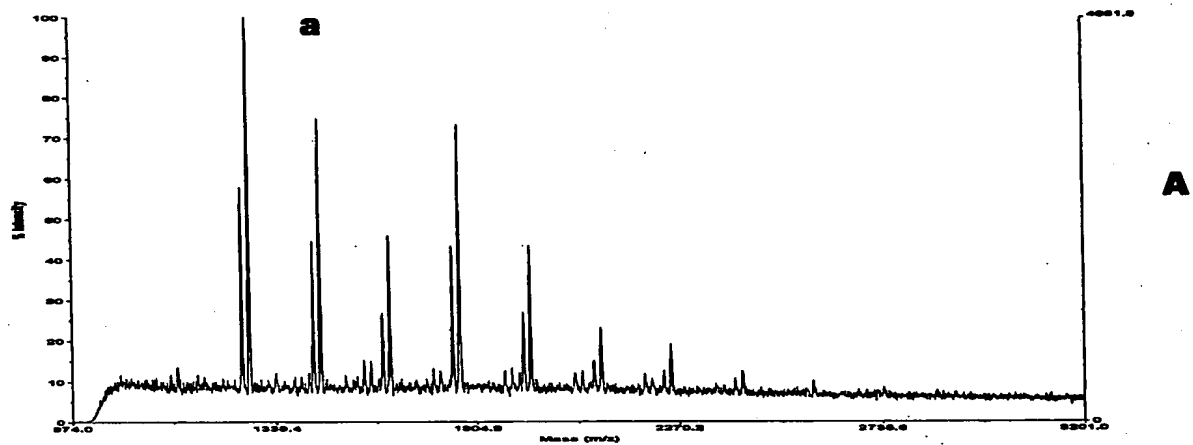
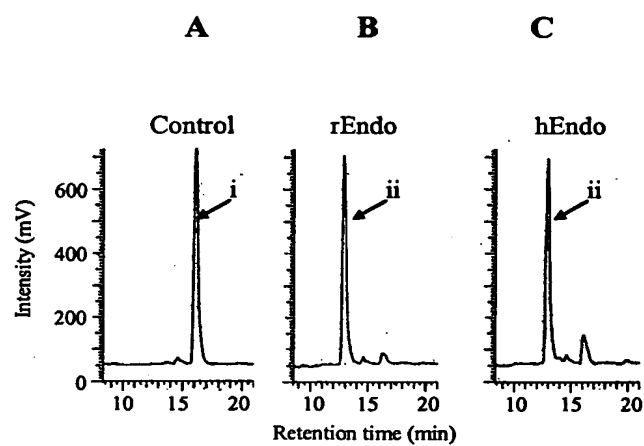
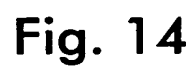


Fig. 12



**Fig. 13**



**Fig. 14**

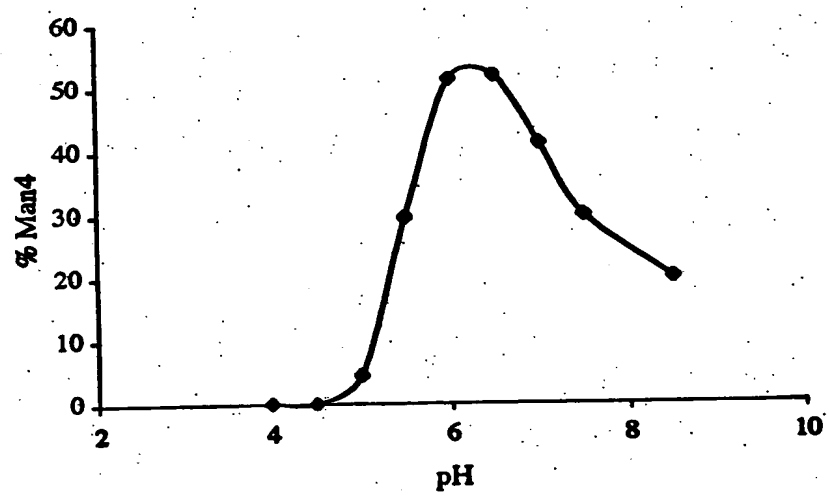


Fig. 15